Regional Sediment Management in the US Army Engineer District, Mobile

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Historically, the US Army Corps of Engineers (USACE) has managed navigation and beach restoration on a project-by-project basis rather than managing the coastal system that encompasses the individual projects. This approach to project management, and therefore sediment management, may adversely impact up-drift and downdrift beaches and/or adjacent projects. For example, when sand is removed from navigation channels and placed in upland or offshore disposal sites, it will not return to the littoral system. Consequently, the supply of sand to downdrift beaches is reduced resulting in increased potential for erosion. To address this issue, the USACE implemented a Regional Sediment Management (RSM) Demonstration program in the USACE Mobile District (CESAM). The purpose of the program was to evaluate the benefits of managing sediments as a regional scale resource, and therefore manage projects on a regional basis. The concept of RSM resulted from the 67th meeting of the USACE Coastal Engineering Research Board (CERB) held in May 1998. Goals set for the RSM demonstration program by the CERB include:

- Implement regional sediment management practices
- Improve economic performance by linking projects
- Develop new engineering techniques to optimize/conserve sand
- Determine bureaucratic obstacles to regional sediment management
- Manage sand in concert with the environment

The CESAM RSM demonstration was completed in 2002. This paper discusses the RSM demonstration program and the CESAM efforts to implement regional sediment management practices through improved project and sediment management.